

## 진도서형 대흉근피판의 장점

최은창 · 최재영 · 강성석

### True Island Pectoralis Major Myocutaneous Flap : Its Advantages.

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#### ABSTRACT

**Background and Objectives :** Pectoralis major myocutaneous flap (PMMCF) is a workhorse flap of head and neck reconstruction and it has four types depending on the nature of the vascular pedicle. True island type PMMCF has many advantages over the conventional muscular type, but reports on this type of flap and its advantages are lacking. **Material and Method :** Fifty two PMMCF (50 patients) used for head and neck reconstruction between 1992 and 1998 were reviewed retrospectively. There were 16 muscular types and 36 true island type PMMCF. We compared the incidences of complication between the two groups. **Result :** Six marginal necrosis (less than 20%) and 1 major necrosis (more than 50%) developed in 16 muscular type PMMCF. However, in 36 true island type PMMCF, 1 marginal necrosis and 2 major necrosis developed. **Conclusion :** True island type PMMCF has the following advantages over muscular type : 1) True island type has 3 -4 cm gain in length. 2) Flap could be harvested at a more cephalic portion of the chest. 3) Unwanted tension of the flap could be avoided. 4) The vascular pedicle is not compressed between the skin and the clavicle. 5) The rotation of the vascular pedicle is natural without kinking. 6) Ugly bulge over the clavicle is absent postoperatively. 7) This type could be used regardless of types of neck dissection. (**Korean J Otolaryngol 2000;43:201-7**)

**KEY WORDS :** Pectoralis major myocutaneous flap · Island flap · Head and neck reconstruction.

가 , 가 ,  
 , 가  
가  
가 (full paddle),  
(muscle paddle),  
가 (island paddle),  
(free paddle) 가  
가  
 : 1999 9 13 / : 2000 1 3  
 : , 120 - 752 134 . 1992 1998  
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2)  
4 × 4

1992 1998

50 (52 )

가 가

가 44 가 6 . 가 . (

16 36

. 2 90

single island flap 180 .)

2 double island flap 가 가

가 19 12 ,

10 가 4 , 가 3 ,

2 , 2 .

4 , 가 2

6 3 , 1 ,

3 7

3

16 가

가 9 , 6

, , 가 1 ,

2 .

20%

(marginal necrosis)

50% (major necrosis)

(Fig. 1).

(myocutaneous per -

forator)

paired t - test

가

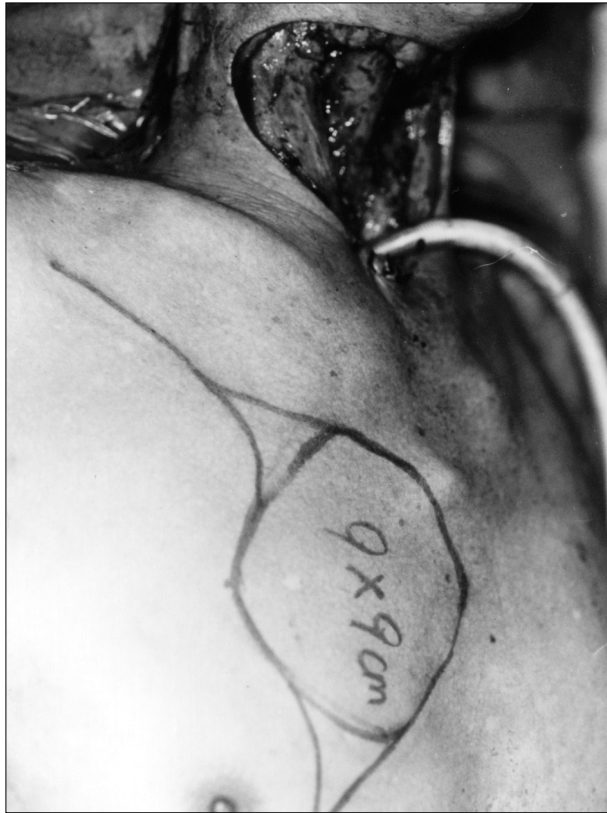
가

가 , ,

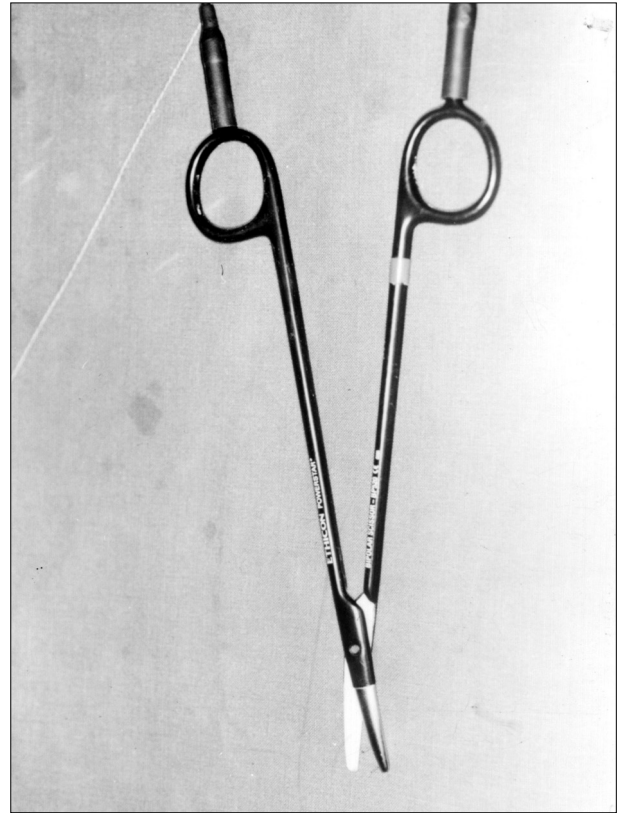
1 cm 가 가

(electrocautery) (twitching)

1) 가 가



**Fig. 1.** Skin incision of pectoralis major myocutaneous flap. Almond shape skin incision was made for easy primary closure.



**Fig. 2.** Bipolar scissor. With this scissor bloodless cutting of muscle without muscle contraction was possible.

2). bipolar scissor 가 (Fig.

3 cm 가 . 3 3 (5.7%) 2

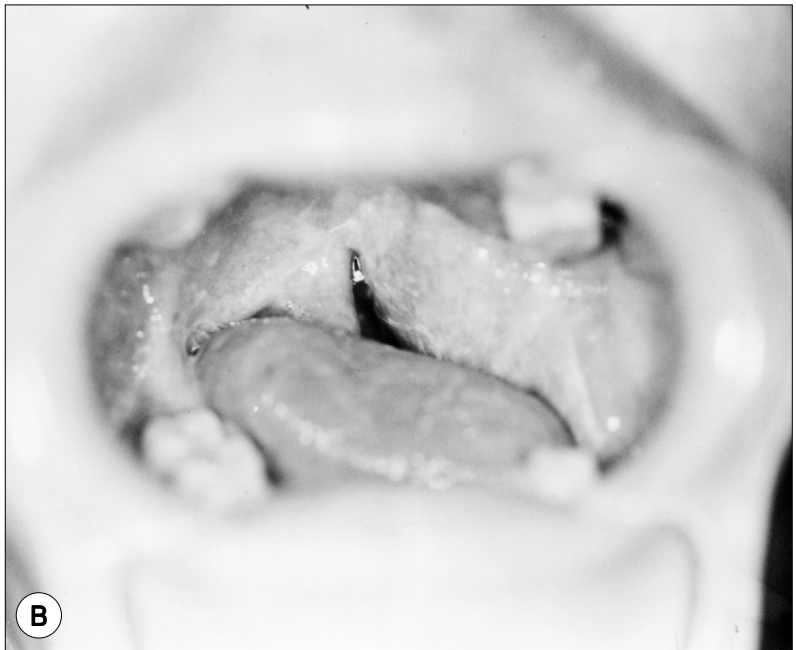
~5 cm . neck dissection) 4 가 (Fig. 3A).

가 cm 가 가

50% 가 52 1

SOND(supraomohyoid 가 80% 가

가 가



**Fig. 3.** A : True island type pectoralis major myocutaneous flap. Pectoralis major muscle was partially separated from the pedicle. B : Postoperative intraoral view.

가 가

20%

52 7 (13%)

16 6

36 1

( $p < 0.05$ ). 7

1 ,

3 , 1 , 가 1

(Table 1 and 2).

2 ,

5 , 3

6 , 2

( $p > 0.05$ ).

4 11

11

가

가 1

36

**Table 1.** Reconstruction sites & frequencies of flap necrosis in muscular type PMMCF\*

Site	No. of case	Marginal loss	Major loss
Oral tongue	4	3	0
Tonsil	3	1	0
Pharynx	3	0	1
Neck skin	3	1	0
Floor of mouth	2	1	0
Base of tongue	1	0	0
Total	16	6	1

PMMCF\* : pectoralis major myocutaneous flap

**Table 2.** Reconstruction sites & frequencies of flap necrosis in true island type PMMCF\*

Site	No. of case	Marginal loss	Major loss
Neck skin	16	0	0
Tonsil	9	0	0
Oral tongue	6	0	0
Thru & thru	2	0	0
Pharynx	1	1	0
Floor of mouth	1	0	1
Base of tongue	1	0	1
Total	36	1	2

PMMCF\* : pectoralis major myocutaneous flap

가 3 cm 가

random portion

가



**Fig. 4.** A, B : Figures of patients neck, immediate postoperatively (4A) and one years after true island type pectoralis major myocutaneous flap. Note no bulge over the clavicle.

(Fig. 3B).

bulging  
(Fig. 4A and B). sulcus

가  
가  
가

가

가

<sup>3)</sup> 가  
가

가

가

가

가

Joh <sup>5)</sup> Lew <sup>6)</sup>

<sup>4)</sup>



3~4 cm , 가  
 가 . 가  
 ,  
 가 . ,  
 ,  
 .  
 : . . .

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